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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/649,954	08/29/2000	Norbert George Vogl	YOR920000534USI 9872	
759	90 05/06/2004		EXAMINER	
Louis J Percello Intellectual			TIV, BACKHEAN	
Property Law Dept IBM Corporation		ART UNIT	PAPER NUMBER	
P O Box 218		2151		
Yorktown Heights, NY 10598			DATE MAILED: 05/06/2004	ي.

Please find below and/or attached an Office communication concerning this application or proceeding.

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·	v	Application No.	Applicant(s)			
		09/649,954	VOGL ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Backhean Tiv	2151			
Period fe	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
THE - External control	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.15 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status	·					
1)🛛	Responsive to communication(s) filed on 29 A	ugust 2000.				
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This	action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposit	ion of Claims					
4)⊠	Claim(s) <u>1-27</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-27</u> is/are rejected. Claim(s) <u>1,2,7,18,22,23,26,and 27</u> is/are objected to.					
8)∐	Claim(s) are subject to restriction and/o	r election requirement.				
Applicat	ion Papers					
9)[The specification is objected to by the Examine	r.				
10)[10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
	Acknowledgment is made of a claim for foreign ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document)-(d) or (f).			
	2. Certified copies of the priority document		on No			
	3. Copies of the certified copies of the prior		ed in this National Stage			
	application from the International Bureau	• • • • • • • • • • • • • • • • • • • •				
7	See the attached detailed Office action for a list	or the certified copies not receive	3G.			
Attachmer	nt(s)					
1) Noti	ce of References Cited (PTO-892)	4) Interview Summary				
	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate Patent Application (PTO-152)			
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	6) Other:	atom repriouded (i 10-102)			

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1	Detailed Action
2	Claims 1-27 are pending in this application.
3	
4	Claim Objections
5	Claims 1,2,7,18,22,23,26,27 are objected to because of the following
6	informalities:
7	As per claim 1, the applicant's states "respective portion", line 20, it is unclear
8	what is meant by "respective portion". Does the applicant mean respective portion of the
9	memory or respective portion of the file or respective portion of the database?
10	Claims 23,26, and 27 are objected to under the same deficiency as claim 1.
11	As per claim 2, the applicant's states "one or more portions", it is unclear what is
12	meant by "one or more portions". Does the applicant mean one or more portions of the
13	memory or network buffer or file?
14	Claim 7 and 18 is objected to under the same deficiency as claim 2.
15	Claim 7 is also objected to because, the limitation "the burst size" and "the burst
16	rate" in lines 4 and 5. Claim 5, which claim 7 is dependant on, recites a network
17	dispatcher, where the transmission criteria further include any one or more of the
18	following: a duration, a burst rate, and a burst size. The transmission criteria does not
19	include all three criteria so if the duration was to be chosen and the criteria, claim 7
20	would not make sense.
21	Claim 22 recites, "an status indicator", this is grammatically incorrect. It should
22	instead read "a status indicator".

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1 Appropriate correction is required. 2 3 Claim Rejections - 35 USC § 103 4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all 5 obviousness rejections set forth in this Office action: 6 7 8 9 10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. 11 Claims 1-11, 23, 26, 27 are rejected under 35 U.S.C. 103(a) as being 12 13 unpatentable over US Patent 6,240,460 issued to Mitsutake et al. (Mitsutake) in view of 14 US Patent 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to 15 Hisanaga et al. (Hisanaga). 16 As per claim 1, Mitsutake teaches a computer network dispatcher comprising: 17 one or more memories(col.10,lines 23-28); 18 19 one or more inputs for accessing one or more files from a database stored in the memory(col.1,lines 23-29,col.7,lines 16-21;it is inherent that there is 20 21 a database stored in memory because data is being transmitted from one 22 terminal to another); one or more outputs to one or more respective network buffers(col.3,lines 23 24 30-34): one of the transmission criteria being a quantity to transmit criteria defining 25 26 a quantity of one or more of the portions of the respective file to

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transmit(col.10,line 37) and another of the transmission criteria being one or more release times being the time at which the respective portion is to be written to the network buffer(col.10,lines 30-41); a feedback using a quantity completion measure to estimate a completion time of the writing of the respective portion to the respective network buffer(col.20,lines 31-49); a dispatching process that determines an available space on one or more of the network buffers and the dispatching process taking a minimum value of the available space and the quantity of the respective portion, the dispatching process writing the minimum value of the respective portion to one or more of the network buffers(col.29,lines 1-18; by taking the average time of each page to be printed, the examiner interprets that this is the minimum value of available space on the network buffer and by scheduling the print-out order of the job on the printer as writing it to the network buffer);

However does not teach one or more file lists, stored in one or more of the memories, identifying one or more of the files in the database that are to be transmitted over one or more networks connected to the respective network buffer; one or more schedulers that schedules one or more portions of one or more of the files to be written to the respective network buffers by defining transmission criteria about each of the files in the file list; the scheduler rescheduling one or more of the portions if one or more of the portions can not be scheduled to meet the respective transmission criteria; a current

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system time, the dispatching process determining if the system time is greater than or
 equal to one of the release times.

Fox teaches one or more file lists, stored in one or more of the memories, identifying one or more of the files in the database that are to be transmitted over one or more networks connected to the respective network buffer(col.3,lines 34-46); one or more schedulers that schedules one or more portions of one or more of the files to be written to the respective network buffers by defining transmission criteria about each of the files in the file list(col.3,lines 34-46); the scheduler rescheduling one or more of the portions if one or more of the portions can not be scheduled to meet the respective transmission criteria(col.3,lines 34-46).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of transmitting data with certain criteria as taught by Mitsutake to add a scheduler to transmit data as taught by Fox in order to improve data transmission by taking into account available resources(col.1,lines 4-9)

Mitsutake in view of Fox however does not teach a current system time, the dispatching process determining if the system time is greater than or equal to one of the release times.

Hisanaga teaches a current system time, the dispatching process determining if the system time is greater than or equal to one of the release times(col.5, line 65-col.6,line 3; examiner interprets the time for transmission as the system time and the time period as the release time).

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buffer(Mitsutake, col.20, lines 40-49).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of transmitting data with a scheduler for certain criteria as taught by Mitsutake in view of Fox to take into account system time as taught by Hisanaga in order to obtain high efficiency of use of transmission bandwidth(col.4,lines 41-44). As per claim 2, a dispatcher, as in claim 1, where the rescheduling changes the transmission criteria of one or more of the portions(Fox, col.3, lines 33-46). As per claim 3, a dispatcher, as in claim 2, where the changes to the transmission criteria include any one or more of the following: changing one or more release times, changing one or more of the quantities, removing one or more of the transmission criteria, and adding one or more transmission criteria(Fox, col.3,lines 33-46). As per claim 4, a network dispatcher, as in claim 1, where the available space is influenced by any one or more of the following: a network speed, a network bandwidth, a network congestion, a time of network availability, a duration of network availability, and a network use pricing(Mitsutake, col.1, lines 31-35). As per claim 5, a network dispatcher, as in claim 1, where the transmission criteria further include any one or more of the following: a duration, a burst rate, and a burst size(Mitsutake, col.20, lines 40-49). As per claim 6, a network dispatcher, as in claim 5, where duration establishes an end time beyond which no more of the portion is written to the network

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1 As per claim 7, a network dispatcher, as in claim 5, where the portion is 2 partitioned into quantities of a size equal to the burst size and each quantity is written to 3 the respective network buffer at a time interval equal to the burst rate(Hisanaga, 4 col.9,lines 13-24). 5 As per claim 8, a network dispatcher, as in claim 1, where the file list further 6 identifies one or more destination addresses of one or more recipients (Hisanaga, 7 col.11,lines 17-20). 8 As per claim 9, a network dispatcher, as in claim 1, where the file list further 9 identifies one or more transmission types defining how the portion is sent over the 10 network(Mitsutake, col.4,lines 12-45). 11 As per claim 10, a network dispatcher, as in claim 9, where the transmission 12 types include one or more of the following: unicast, multicast, broadcast, internet protocol (IP), IPX, asynchronous transfer mode (ATM), UDP, and TCP/IP(Mitsutake, 13 14 col.4, lines 12-45). As per claim 11, a network dispatcher, as in claim 1, where the quantity 15 16 completion measure is any one or more of the following: an accumulated amount of one 17 or more of the portions transmitted, and an amount of the portion transmitted(Mitsutake, 18 col.29, lines 1-18). 19 Claim 23 is of the same scope as claim 1, therefore is rejected based on the 20 same rationale. Claim 23 recites a method while claim 1 is a system (see claim 1 21 rejection).

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Claims 26 and 27 are of the same scope as Claim 1, therefore is rejected based on the same rationale. Claim 27 recites a computer program produce while claim 1 is a system (see claim 1 rejection).

Claims 12-17,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et al.(Hisanaga) in further view of US Patent 5,819,094 issued to Sato et al.(Sato).

Mitsutake in view of Fox in further view of Hisanaga teaches all the limitations of claim 1, however does not teach as per claim 12, a network dispatcher, as in claim 1, where a time stamp is stored with the quantity completion measure in a history log.

Sato teaches where a time stamp is stored with the quantity completion measure in a history log(col. 5,lines 55-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of transmitting data with a scheduler for certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga to add where a time stamp is stored with the quantity completion measure in a history log as taught by Sato in order to log data collection and analysis(col.2,lines 15-16).

As per claim 13, a network dispatcher, as in claim 12, where the quantity completion measure is one or more statistics of the history log(Mitsutake, col.20,lines 31-49 and Sato, col.2,lines 36-42).

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As per claim 14, a network dispatcher, as in claim 13 when the statistics include any one or more of the following: an average amount written and a change in amount written(Sato, col.2,lines 43-46).

As per claim 15, a network dispatcher, as in claim 12, where one or more parts of the history log is recorded(Sato, col.2,lines 48-51).

As per claim 16, a network dispatcher, as in claim 1, where one or more errors are stored in a history log(Sato, col.9, lines 10-16).

As per claim 17, a network dispatcher, as in claim 16, where the errors include any one or more of the following: a disk error, a network error, a destination not found error, and a destination not responding error(Hisanaga, col.6,lines 20-25;examiner interprets the transmission error as a destination not found error).

As per claim 25, a method, as in claim 23, further comprising the step of time stamping one or more of the quantity completion measures(Sato, col.5,lines 55-61).

Claims 18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et al.(Hisanaga) in further view of US Patent 6,502,062 issued to Acharya et al.(Acharya).

Mitsutake in view of Fox in further view of Hisanaga teaches all the limitations of claim 1, however does not teach as per claim 18, a network dispatcher, as in claim 1,

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further comprising a network use criteria table used by the scheduler to schedule the portions.

Acharya teaches a network use criteria table used by the scheduler to schedule the portions(Fig.6 and Fig.7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of transmitting data with a scheduler for certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga to add a network use criteria table used by the scheduler to schedule the portions as taught by Acharya in order to improve scheduling methods that provide satisfactory performance(col.2,lines 57-60).

As per claim 19, a network dispatcher, as in claim 1, further comprising a network use criteria table used by the dispatching process to take the minimum value of the available space, the quantity of the respective portion, and a remaining amount of defined network use(Acharya, Fig.6 and Fig.7).

Claims 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et al.(Hisanaga) in further view of US Patent 6,502,062 issued to Acharya et al.(Acharya) in further view of US Patent 5,819,094 issued to Sato et al.(Sato).

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Mitsutake in view of Fox in further view of Hisanaga in further view of Acharya teaches all the limitation of claim 18 and an amount of network use field(Acharya, Fig.6 and Fig.7), however does not teach as per claim 20, a network dispatcher, as in claim 18, where the network use criteria table has a plurality of records, each record containing a time stamp field.

Sato teaches the network use criteria table has a plurality of records, each record containing a time stamp field(Fig.2,element 21).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of transmitting data with a scheduler for certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga in further view of Acharya to add the network use criteria table has a plurality of records, each record containing a time stamp field as taught by Sato in order to log data collection and analysis(col.2,lines 15-16).

As per claim 21, a network dispatcher, as in claim 20, where an aggregate of the amount of network use is recorded in a history log(Archarya, col.9,lines 40-59).

Claims 22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et al.(Hisanaga) in further view of US Patent 5,581,369 issued to Righter et al.(Righter).

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Mitsutake in view of Fox in further view of Hisanaga teaches all the limitations of claim 1, however does not teach as per claim 22, a network dispatcher, as in claim 1, further comprising a status indicator for sending one or more acknowledgments to one or more schedulers indicating one or more of the portions have been entirely transmitted over the network.

Righter teaches a status indicator for sending one or more acknowledgments to one or more schedulers indicating one or more of the portions have been entirely transmitted over the network(col.5,lines21-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of transmitting data with a scheduler for certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga to add the idea of having a status indicator to inform a scheduler that data transmission is complete as taught by Righter in order to know when a data transmission is complete(col.5,lines 21-33).

Claim 24 is of the same scope as claim 22, therefore is rejected based on the same rationale (see claim 22 rejection).

18 Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (703) 305-8879. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M. Monday-Friday.

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andrew Caldwell
Andrew Caldwell

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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7 published applications may be obtained from either Private PAIR or Public PAIR.

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